

## CLAIMS

What is claimed is:

1. A method of predicting increased risk of prostate cancer in an individual, comprising:
  - a) measuring the concentration of insulin-like growth factor (IGF) in a body fluid from an individual;
 

wherein an elevated concentration of IGF above a reference range for IGF indicates an increased risk for prostate cancer.
2. The method of claim 1, wherein said body fluid is selected from the group consisting of blood, plasma, serum and seminal fluid.
3. The method of claim 1, wherein said IGF is total IGF, free IGF or complexed IGF.
4. A method of predicting increased risk of prostate cancer in an individual, comprising:
  - a) measuring the concentration of insulin-like growth factor-I (IGF-I) in a specimen from an individual;
  - b) measuring the concentration of insulin-like growth factor binding protein-3 (IGFBP-3) in a specimen from said individual; and
  - c) conducting a multivariate adjustment of the IGF-I concentration relative to the IGFBP-3 concentration to provide an adjusted IGF-I level;
 

wherein the adjusted IGF-I level above a reference range for adjusted IGF-I indicates an increased risk for prostate cancer.
5. The method of claim 4, wherein said specimen is selected from the group consisting of blood, plasma, serum and seminal fluid.
6. The method of claim 4, wherein said IGF-I is total IGF-I, free IGF-I or complexed IGF.
7. The method of claim 4, wherein said IGFBP-3 is total IGFBP-3, free IGFBP-3 or complexed IGFBP-3.
8. A method of predicting increased risk of prostate cancer in an individual, comprising:
  - a) measuring an IGF status in a body fluid from an individual;
 

wherein increases in the IGF status as compared to normal reference values indicates an increased risk for prostate cancer.

9. The method of claim 8, wherein the IGF status is measured by measuring both IGF-I and IGFBP-3, IGF-I alone, or IGFBP-3 alone.
10. The method of claim 8, wherein said body fluid is blood, plasma, serum or seminal fluid.
11. The method of claim 9, wherein said IGF-I is total IGF-I, free IGF-I or complexed IGF-I.
12. A method of predicting increased risk of prostate cancer with a poor prognosis, comprising:
  - a) measuring the concentration of insulin-like growth factor-I (IGF-I) in a specimen from an individual;
  - b) measuring the concentration of prostate specific antigen (PSA) in a specimen from said individual; and
  - c) conducting a multivariate adjustment of the IGF-I concentration relative to the PSA concentration to provide an adjusted IGF/PSA value;  
wherein an adjusted IGF/PSA value above the reference range for adjusted IGF/PSA indicates an increased risk for prostate cancer with a poor prognosis.
13. The method of claim 12, wherein said specimen is selected from the group consisting of blood, plasma, serum and seminal fluid.
14. The method of claim 12, wherein said IGF-I is total IGF-I, free IGF-I or complexed IGF-I.
15. A method of predicting increased risk of severe prostate cancer in an individual, comprising:
  - a) measuring the concentration of insulin-like growth factor-1 (IGF-I) in a specimen from an individual;
  - b) measuring the concentration of insulin-like growth factor binding protein-3 (IGFBP-3) in a specimen from said individual;
  - c) measuring the concentration of prostate specific antigen (PSA) in a specimen from said individual; and
  - d) conducting a multivariate adjustment of the IGF-I concentration relative to the IGFBP-3 concentration and PSA concentration to provide an adjusted IGF/IGFBP/PSA value;

wherein an adjusted IGF/IGFBP/PSA value above the reference range for adjusted IGF/IGFBP/PSA indicates an increased risk for severe prostate cancer.

16. The method of claim 15, wherein said specimen is selected from the group consisting of blood, plasma, serum and seminal fluid.
17. The method of claim 15, wherein said IGF-I is total IGF-I, free IGF-I or complexed IGF-I.
18. The method of claim 15, wherein said IGFBP-3 is total IGFBP-3, free IGFBP-3 or complexed IGFBP-3.
19. A method of treating prostate cancer, comprising administering an IGF-axis component modulating agent to an individual with prostate cancer.
20. A method of claim 18, wherein said IGF-axis component modulating agent is selected from the group consisting of somatostatin, somatostatin analogs, and growth hormone releasing antagonists.